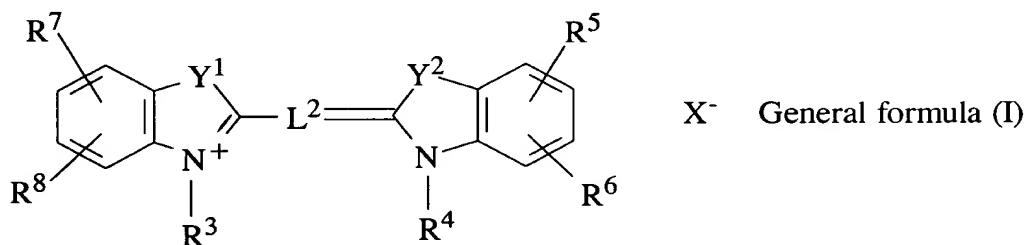


CLAIM SUMMARY DOCUMENT

1-10. (Currently canceled)

11. (New) A positive-type planographic printing plate precursor comprising:  
a photosensitive layer provided as a top layer and obtained by coating and drying on  
a support a photosensitive layer coating solution formed of a photosensitive composition,  
which contains a cyanine dye represented in the following general formula (I) and a  
polymer insoluble in water and soluble in an aqueous alkali solution, dissolved or dispersed  
in a solvent system, which includes a solvent having a boiling point lower than 200°C,  
wherein 80% by weight or more of the solvent consists of a solvent having a boiling point  
lower than 100°;

wherein a solubility in an aqueous alkali solution of the photosensitive layer is as a  
top layer increased by an infrared laser exposure:



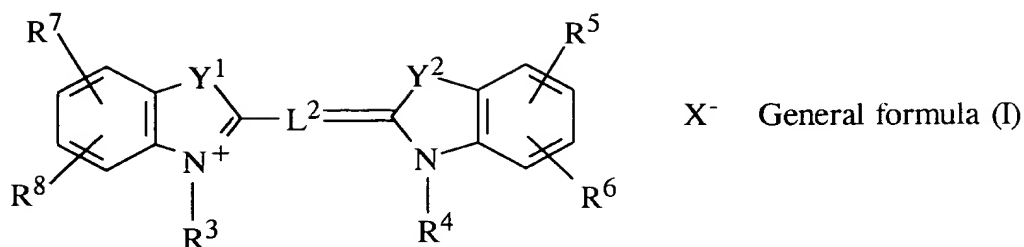
wherein, each of Y<sup>1</sup> and Y<sup>2</sup> represents a dialkylmethylene group or a sulfur atom; each of R<sup>3</sup> and R<sup>4</sup> represents an alkyl group, alkenyl group, alkynyl group or phenyl group which may be substituted; L<sup>2</sup> represents a trimethine group, pentamethine group or heptamethine group which may be substituted, and two substituents of the pentamethine group or the heptamethine group may be combined with each other to form a cycloalkene ring having 5

to 7 carbon atoms; each of R<sup>5</sup> through R<sup>8</sup> represents a hydrogen atom or an alkyl group, alkenyl group, alkoxy group, cycloalkyl group or aryl group which may be substituted, and R<sup>5</sup> and R<sup>6</sup>, and R<sup>7</sup> and R<sup>8</sup> may be combined with each other to form a ring structure; and X<sup>-</sup> represents an anion.

12. (New) A positive-type planographic printing plate precursor according to claim 11, wherein the photosensitive layer coating solution is formed of the photosensitive composition dissolved or dispersed in a solvent system which includes a solvent having a boiling point lower than 200°C, wherein 90% by weight or more of the solvent consists of a solvent having a boiling point lower than 100°.

13. (New) A positive-type planographic printing plate precursor comprising:  
a photosensitive layer as a top layer and obtained by coating and drying on a  
support a photosensitive layer coating solution formed of a photosensitive composition, which contains a cyanine dye represented in the following general formula (I) and a polymer insoluble in water and soluble in an aqueous alkali solution, dissolved or dispersed in a solvent system, which includes a solvent having a boiling point lower than 200°C, wherein 80% by weight or more of the solvent consists of a solvent having a boiling point lower than 100°;

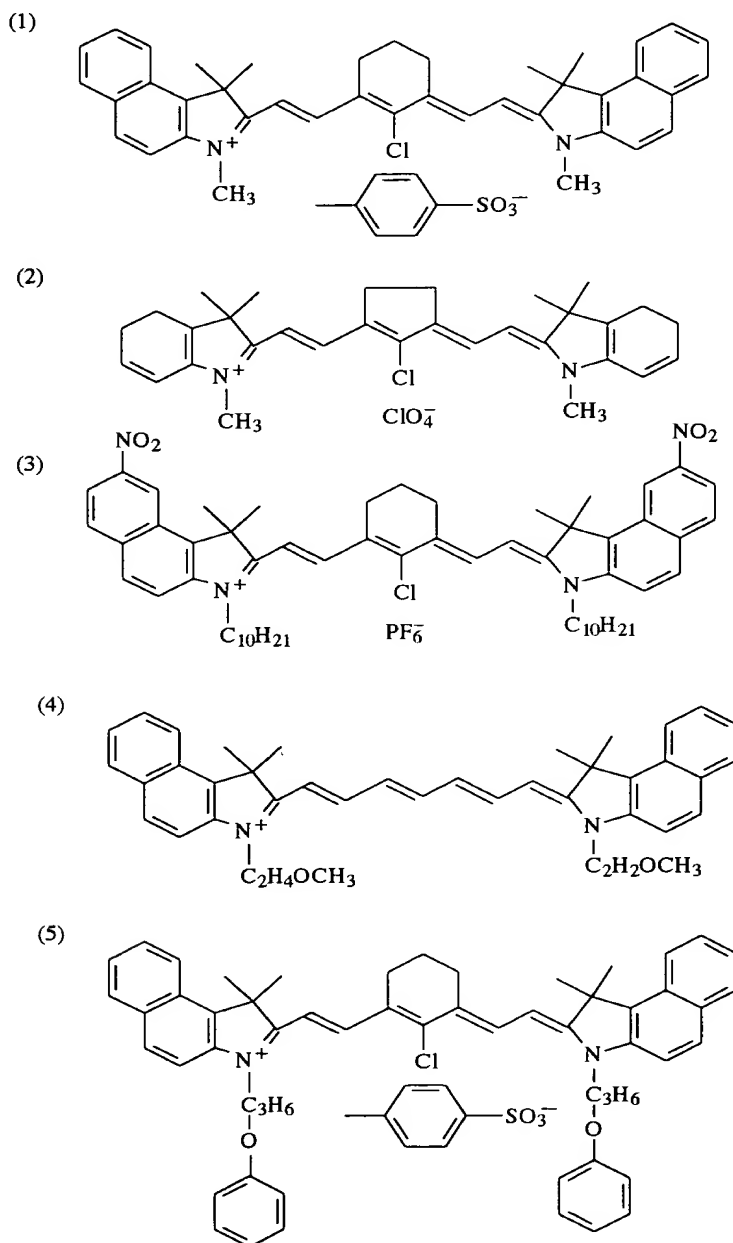
wherein a solubility in an aqueous alkali solution of the photosensitive layer is increased by an infrared laser exposure:



wherein, each of Y<sup>1</sup> and Y<sup>2</sup> represents a dialkylmethylene group or a sulfur atom; each of R<sup>3</sup> and R<sup>4</sup> represents an alkyl group, alkenyl group, alkynyl group or phenyl group which may be substituted; L<sup>2</sup> represents a trimethine group, pentamethine group or heptamethine group which may be substituted; and two substituents of the pentamethine group or the heptamethine group may be combined with each other to form a cycloalkene ring having 5 to 7 carbon atoms; each of R<sup>5</sup> through R<sup>8</sup> represents a hydrogen atom or an alkyl group, alkenyl group, alkoxy group, cycloalkyl group or aryl group which may be substituted, and R<sup>5</sup> and R<sup>6</sup>, and R<sup>7</sup> and R<sup>8</sup> may be combined with each other to form a ring structure; and X<sup>-</sup> represents an anion wherein of the residual solvent contained in the photosensitive layer 50% by weight or more of the solvent consists of solvent having a boiling point lower than 100°.

14. (New) A positive-type planographic printing plate precursor according to claim 13, wherein of the residual solvent contained in the photosensitive layer 70% by weight or more of the solvent consists of a solvent having a boiling point lower than 100°.

15. (New) A positive-type planographic printing plate precursor according to claim 11, wherein the cyanine dye represented in the general formula (I) is at least one of compounds (1) to (5) shown below:

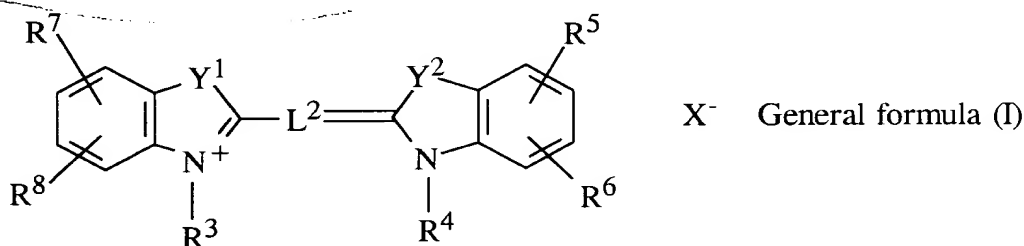


16. (New) A method for producing a positive-type planographic printing plate precursor comprising the steps of:

preparing a photosensitive composition containing a cyanine dye represented in the following general formula (I) and a polymer insoluble in water and soluble in an aqueous alkali solution;

preparing a photosensitive layer coating solution by dissolving or dispersing the photosensitive composition in a solvent system which includes a solvent having a boiling point lower than 200°C, wherein 80% by weight or more of the solvent consists of a solvent having a boiling point lower than 100°; and

coating and drying the photosensitive layer coating solution on a support to form a photosensitive layer as a top layer:



wherein, each of Y<sup>1</sup> and Y<sup>2</sup> represents a dialkylmethylene group or a sulfur atom; each of R<sup>3</sup> and R<sup>4</sup> represents an alkyl group, alkenyl group, alkynyl group or phenyl group which may be substituted; L<sup>2</sup> represents a trimethine group, pentamethine group or heptamethine group which may be substituted, and two substituents of the pentamethine group or the heptamethine group may be combined with each other to form a cycloalkene ring having 5 to 7 carbon atoms; each of R<sup>5</sup> through R<sup>8</sup> represents a hydrogen atom or an alkyl group, alkenyl group, alkoxy group, cycloalkyl group or aryl group which may be substituted, and

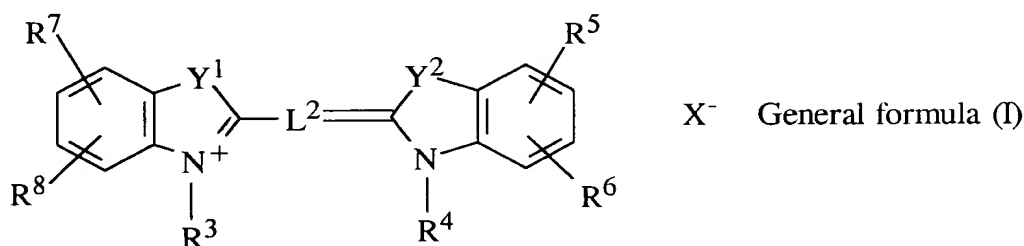
$R^5$  and  $R^6$ , and  $R^7$  and  $R^8$  may be combined with each other to form a ring structure; and  $X^-$  represents an anion.

17. (New) A method for producing a positive-type planographic printing plate precursor comprising the steps of:

preparing a photosensitive composition containing a cyanine dye represented in the following general formula (I) and a polymer insoluble in water and soluble in an aqueous alkali solution;

preparing a photosensitive layer coating solution by dissolving or dispersing the photosensitive composition in a solvent system which includes a solvent having a boiling point lower than 200°C, wherein 90% by weight or more of the solvent consists of a solvent having a boiling point lower than 100°; and

coating and drying the photosensitive layer coating solution on a support to form a photosensitive layer as a top layer:



wherein, each of  $Y^1$  and  $Y^2$  represents a dialkylmethylene group or a sulfur atom; each of  $R^3$  and  $R^4$  represents an alkyl group, alkenyl group, alkynyl group or phenyl group which

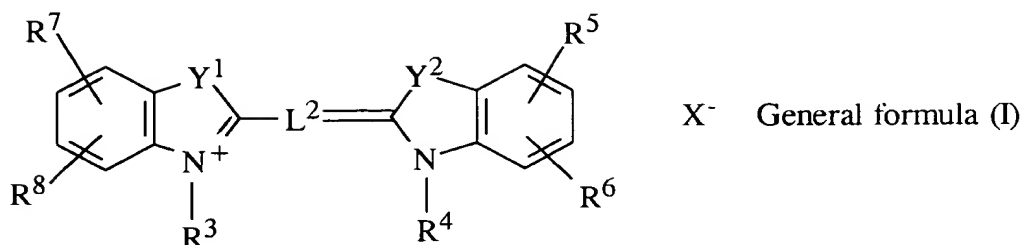
may be substituted;  $L^2$  represents a trimethine group, pentamethine group or heptamethine group which may be substituted, and two substituents of the pentamethine group or the heptamethine group may be combined with each other to form a cycloalkene ring having 5 to 7 carbon atoms; each of  $R^5$  through  $R^8$  represents a hydrogen atom or an alkyl group, alkenyl group, alkoxy group, cycloalkyl group or aryl group which may be substituted, and  $R^5$  and  $R^6$ , and  $R^7$  and  $R^8$  may be combined with each other to form a ring structure; and  $X^-$  represents an anion.

18. (New) A method for producing a positive-type planographic printing plate precursor comprising the steps of:

preparing a photosensitive composition containing a cyanine dye represented in the following general formula (I) and a polymer insoluble in water and soluble in an aqueous alkali solution;

preparing a photosensitive layer coating solution by dissolving or dispersing the photosensitive composition in a solvent system which includes a solvent having a boiling point lower than  $200^{\circ}\text{C}$ , wherein 80% by weight or more of the solvent consists of a solvent having a boiling point lower than  $100^{\circ}$ ; and

coating and drying the photosensitive layer coating solution on a support to form a photosensitive layer as a top layer:



wherein, each of Y<sup>1</sup> and Y<sup>2</sup> represents a dialkylmethylene group or a sulfur atom; each of R<sup>3</sup> and R<sup>4</sup> represents an alkyl group, alkenyl group, alkynyl group or phenyl group which may be substituted; L<sup>2</sup> represents a trimethine group, pentamethine group or heptamethine group which may be substituted, and two substituents of the pentamethine group or the heptamethine group may be combined with each other to form a cycloalkene ring having 5 to 7 carbon atoms; each of R<sup>5</sup> through R<sup>8</sup> represents a hydrogen atom or an alkyl group, alkenyl group, alkoxy group, cycloalkyl group or aryl group which may be substituted, and R<sup>5</sup> and R<sup>6</sup>, and R<sup>7</sup> and R<sup>8</sup> may be combined with each other to form a ring structure; and X<sup>-</sup> represents an anion wherein of the residual solvent contained in the photosensitive layer 50% by weight or more of the solvent consists of a solvent having a boiling point lower than 100°.

19. (New)    A method for producing a positive-type planographic printing plate precursor according to claim 18, wherein of the residual solvent contained in the photosensitive layer 70% by weight or more of the solvent consists of a solvent having a boiling point lower than 100°.



20. (New) A method for producing a positive-type planographic printing plate precursor according to claim 16, wherein the cyanine dye represented in the general formula (I) is at least one of compounds (1) to (5) shown below:

